

Project Investment Justification

myDEQ FY21

EV21006

Department of Environmental Quality

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1. GENERAL INFORMATION

PIJ ID: EV21006

PIJ Name: myDEQ FY21

Account: Department of Environmental Quality

Business Unit Requesting: ADEQ

Sponsor: Michael Keyack

Sponsor Title: Deputy Director

Sponsor Email: keyack.michael@azdeq.gov

Sponsor Phone: (602) 771-0095

2. MEETING PRE-WORK

2.1 What is the operational issue or business need that the Agency is trying to solve? (i.e....current process is manual, which increases resource time/costs to the State/Agency, and leads to errors...):

ADEQ processes roughly 28,000 transactions annually via paper form for various permits, reports, and receives payments from roughly 16,000 facilities. This causes ADEQ and the regulated community to enter data into the myDEQ portal multiple times, increasing amount of re-work, and manual reporting. All of this manual effort is error prone and time consuming. This results in permits taking too long to issue, an increased number of facilities out of compliance, and an inefficient process for our customers

2.2 How will solving this issue or addressing this need benefit the State or the Agency?

Implementing the next phase of the myDEQ portal will continue to improve environmental compliance by the regulated community. The public will benefit from more convenient access to public records and environmental information. Automating additional business processes will lead to faster, higher quality inputs from the regulated community.

2.3 Describe the proposed solution to this business need.

myDEQ FY21 program proposes to develop additional online services and add also add new features to the existing online services. This is a continuation of the development efforts after the completion of myDEQ FY19/20. It will continue to leverage the architecture and foundation deployed during Phase 1.

To describe the solution further - myDEQ application is a 3 tier architectural solution. Presentation layer is developed using XML, CSS 3.0, Java script and Bootstrap frame work. Application/middle tier leverages Apache Application Server. Data layer is an Oracle 11g database known as the Arizona Unified Repository for Informational Tracking of the Environment (AZURITE). myDEQ application along with the associated databases has been migrated to Amazon cloud in June 2020.

2.4 Has the existing technology environment, into which the proposed solution will be implemented, been documented?

Yes

2.4a Please describe the existing technology environment into which the proposed solution will be implemented.

The services identified to be migrated online will be value stream mapped and leaned (eliminating waste) prior to the launch of this project. Business and technology requirements will be mapped out as part of the project and

agile scrum project methodology.

2.5 Have the business requirements been gathered, along with any technology requirements that have been identified?

No

2.5a Please explain below why the requirements are not available.

The services identified to be migrated online will be value stream mapped and leaned (eliminating waste) prior to the launch of this project. Business and technology requirements will be mapped out as part of the project and agile scrum project methodology.

3. PRE-PIJ/ASSESSMENT

3.1 Are you submitting this as a Pre-PIJ in order to issue a Request for Proposal (RFP) to evaluate options and select a solution that meets the project requirements?

No

3.1a Is the final Statement of Work (SOW) for the RFP available for review?

3.2 Will you be completing an assessment/Pilot/RFP phase, i.e. an evaluation by a vendor, 3rd party or your agency, of the current state, needs, & desired future state, in order to determine the cost, effort, approach and/or feasibility of a project?

No

3.2a Describe the reason for completing the assessment/pilot/RFP and the expected deliverables.

3.2b Provide the estimated cost, if any, to conduct the assessment phase and/or Pilot and/or RFP/solicitation process.

3.2e Based on research to date, provide a high-level cost estimate to implement the final solution.

4. PROJECT

4.1 Does your agency have a formal project methodology in place?

Yes

4.2 Describe the high level makeup and roles/responsibilities of the Agency, Vendor(s) and other third parties (i.e. agency will do...vendor will do...third party will do).

Project Management - Agency

Business Analysis - Agency

Application Development - Agency and Contractors

Quality Analysis (QA) - Agency and Contractors

Network Configuration & DevOps - Agency

4.3 Will a PM be assigned to manage the project, regardless of whether internal or vendor provided?

Yes

4.3a If the PM is credentialed, e.g., PMP, CPM, State certification etc., please provide certification information.

4.4 Is the proposed procurement the result of an RFP solicitation process?

No

4.5 Is this project referenced in your agency's Strategic IT Plan?

Yes

5. SCHEDULE

5.1 Is a project plan available that reflects the estimated Start Date and End Date of the project, and the supporting Milestones of the project?

Yes

5.2 Provide an estimated start and finish date for implementing the proposed solution.

Est. Implementation Start Date

Est. Implementation End Date

10/1/2020 12:00:00 AM

6/30/2021 12:00:00 AM

5.3 How were the start and end dates determined?

Based on project plan

5.3a List the expected high level project tasks/milestones of the project, e.g., acquire new web server, develop software interfaces, deploy new application, production go live, and estimate start/finish dates for each, if known.

| Milestone / Task | Estimated Start Date | Estimated Finish Date |
|--|----------------------|-----------------------|
| New online service group: Underground Storage Tank - Financial Assurance & Notices of cancellation/Nonrenewal from Insurers | 10/01/20 | 04/30/21 |
| Existing Service groups - New features | 10/01/20 | 06/30/21 |
| New online service group: Underground Storage Tank - UST Suspected Release Notification/Report (24-hr & 14- day), 90 day | 12/01/20 | 05/31/21 |
| New online service group: Underground Storage Tank - Tank site improvement program | 01/01/21 | 06/30/21 |

5.4 Have steps needed to roll-out to all impacted parties been incorporated, e.g. communications, planned

outages, deployment plan?

Yes

5.5 Will any physical infrastructure improvements be required prior to the implementation of the proposed solution. e.g., building reconstruction, cabling, etc.?

No

5.5a Does the PIJ include the facilities costs associated with construction?

5.5b Does the project plan reflect the timeline associated with completing the construction?

6. IMPACT

6.1 Are there any known resource availability conflicts that could impact the project?

No

6.1a Have the identified conflicts been taken into account in the project plan?

6.2 Does your schedule have dependencies on any other projects or procurements?

No

6.2a Please identify the projects or procurements.

6.3 Will the implementation involve major end user view or functionality changes?

Yes

6.4 Will the proposed solution result in a change to a public-facing application or system?

Yes

7. BUDGET

7.1 Is a detailed project budget reflecting all of the up-front/startup costs to implement the project available, e.g, hardware, initial software licenses, training, taxes, P&OS, etc.?

Yes

7.2 Have the ongoing support costs for sustaining the proposed solution over a 5-year lifecycle, once the project is complete, been determined, e.g., ongoing vendor hosting costs, annual maintenance and support not acquired upfront, etc.?

Yes

7.3 Have all required funding sources for the project and ongoing support costs been identified?

Yes

7.4 Will the funding for this project expire on a specific date, regardless of project timelines?

Yes

7.5 Will the funding allocated for this project include any contingency, in the event of cost over-runs or potential changes in scope?

No

8. TECHNOLOGY

8.1 Please indicate whether a statewide enterprise solution will be used or select the primary reason for not choosing an enterprise solution.

The project is using a statewide enterprise solution

8.2 Will the technology and all required services be acquired off existing State contract(s)?

Yes

8.3 Will any software be acquired through the current State value-added reseller contract?

No

8.3a Describe how the software was selected below:

8.4 Does the project involve technology that is new and/or unfamiliar to your agency, e.g., software tool never used before, virtualized server environment?

No

8.5 Does your agency have experience with the vendor (if known)?

Yes

8.6 Does the vendor (if known) have professional experience with similar projects?

Yes

8.7 Does the project involve any coordination across multiple vendors?

No

8.8 Does this project require multiple system interfaces, e.g., APIs, data exchange with other external application systems/agencies or other internal systems/divisions?

Yes

8.9 Have any compatibility issues been identified between the proposed solution and the existing environment, e.g., upgrade to server needed before new COTS solution can be installed?

No

8.9a Describe below the issues that were identified and how they have been/will be resolved, or whether an ADOA-

ASET representative should contact you.

8.10 Will a migration/conversion step be required, i.e., data extract, transformation and load?

Yes

8.11 Is this replacing an existing solution?

No

8.11a Indicate below when the solution being replaced was originally acquired.

8.11b Describe the planned disposition of the existing technology below, e.g., surplus, retired, used as backup, used for another purpose:

8.12 Describe how the agency determined the quantities reflected in the PIJ, e.g., number of hours of P&OS, disk capacity required, number of licenses, etc. for the proposed solution?

They are estimated based on the analysis of business requirements identified for myDEQ FY21.

8.13 Does the proposed solution and associated costs reflect any assumptions regarding projected growth, e.g., more users over time, increases in the amount of data to be stored over 5 years?

Yes

8.14 Does the proposed solution and associated costs include failover and disaster recovery contingencies?

Yes

8.14a Please select why failover and disaster recovery is not included in the proposed solution.

8.15 Will the vendor need to configure the proposed solution for use by your agency?

No

8.15a Are the costs associated with that configuration included in the PIJ financials?

8.16 Will any app dev or customization of the proposed solution be required for the agency to use the project in the current/planned tech environment, e.g. a COTS app that will req custom programming, an agency app that will be entirely custom developed?

Yes

8.16a Will the customizations inhibit the ability to implement regular product updates, or to move to future versions?

No

8.16b Describe who will be customizing the solution below:

Agency staff and contractors

8.16c Do the resources that will be customizing the application have experience with the technology platform being

used, e.g., .NET, Java, Drupal?

Yes

8.16d Please select the application development methodology that will be used:

Agile/Scrum

8.16e Provide an estimate of the amount of customized development required, e.g., 25% for a COTS application, 100% for pure custom development, and describe how that estimate was determined below:

100%

8.16f Are any/all Professional & Outside Services costs associated with the customized development included in the PIJ financials?

Yes

8.17 Have you determined that this project is in compliance with all applicable statutes, regulations, policies, standards & procedures, incl. those for network, security, platform, software/application &/or data/info found at aset.az.gov/resources/psp?

Yes

8.17a Describe below the compliance issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you:

8.18 Are there other high risk project issues that have not been identified as part of this PIJ?

No

8.18a Please explain all unidentified high risk project issues below:

9. SECURITY

9.1 Will the proposed solution be vendor-hosted?

Yes

9.1a Please select from the following vendor-hosted options:

Commercial data center environment, e.g AWS, Azure

9.1b Describe the rationale for selecting the vendor-hosted option below:

ADOA mandated all agencies to discontinue individual data centers and migrate to cloud. ADEQ chose to leverage the ASET negotiated statewide enterprise contract with AWS Gov Cloud.

9.1c Has the agency been able to confirm the long-term viability of the vendor hosted environment?

Yes

9.1d Has the agency addressed contract termination contingencies, e.g., solution ownership, data ownership,

application portability, migration plans upon contract/support termination?

Yes

9.1e Has a Conceptual Design/Network Diagram been provided and reviewed by ASET-SPR?

Yes

9.1f Has the spreadsheet located at <https://aset.az.gov/arizona-baseline-security-controls-excel> already been completed by the vendor and approved by ASET-SPR?

Yes

9.2 Will the proposed solution be hosted on-premise in a state agency?

No

9.2a Where will the on-premise solution be located:

9.2b Were vendor-hosted options available and reviewed?

9.2c Describe the rationale for selecting an on-premise option below:

9.2d Will any data be transmitted into or out of the agency's on-premise environment or the State Data Center?

9.3 Will any PII, PHI, CGIS, or other Protected Information as defined in the 8110 Statewide Data Classification Policy be transmitted, stored, or processed with this project?

No

9.3a Describe below what security infrastructure/controls are/will be put in place to safeguard this data:

10. AREAS OF IMPACT

Application Systems

Application Enhancements;Internal Use Web Application;New Application Development

Database Systems

Oracle

Software

Other

Hardware

Hosted Solution (Cloud Implementation)

Amazon (AWS) GovCloud

Security

Telecommunications

Enterprise Solutions

eLicensing

Contract Services/Procurements

11. FINANCIALS

| Description | PJJ Category | Cost Type | Fiscal Year Spend | Quantity | Unit Cost | Extended Cost | Tax Rate | Tax | Total Cost |
|---|---------------------------------|-------------|-------------------|----------|-------------|---------------|----------|-----|-------------|
| Application software design, build and Test | Professional & Outside Services | Development | 1 | 1 | \$1,290,000 | \$1,290,000 | 0.00 % | \$0 | \$1,290,000 |

| Base Budget (Available) | Base Budget (To Be Req) | Base Budget % of Project |
|------------------------------------|------------------------------------|-------------------------------------|
| \$1,290,000 | \$0 | 100% |
| APF (Available) | APF (To Be Req) | APF % of Project |
| \$0 | \$0 | 0% |
| Other Appropriated (Available) | Other Appropriated (To Be Req) | Other Appropriated % of Project |
| \$0 | \$0 | 0% |
| Federal (Available) | Federal (To Be Req) | Federal % of Project |
| \$0 | \$0 | 0% |
| Other Non-Appropriated (Available) | Other Non-Appropriated (To Be Req) | Other Non-Appropriated % of Project |
| \$0 | \$0 | 0% |

| Total Budget Available | Total Development Cost |
|------------------------|------------------------|
| \$1,290,000 | \$1,290,000 |
| Total Budget To Be Req | Total Operational Cost |
| \$0 | \$0 |
| Total Budget | Total Cost |
| \$1,290,000 | \$1,290,000 |

12. PROJECT SUCCESS

Please specify what performance indicator(s) will be referenced in determining the success of the proposed project (e.g. increased productivity, improved customer service, etc.)? (A minimum of one performance indicator must be specified)

Please provide the performance objective as a quantifiable metric for each performance indicator specified.

Note: The performance objective should provide the current performance level, the performance goal, and the time period within which that performance goal is intended to be achieved. You should have an auditable means to measure and take corrective action to address any deviations.

Example: Within 6 months of project completion, the agency would hope to increase "Neighborhood Beautification" program registration by 20% (3,986 registrants) from the current registration count of 19,930 active participants.

Performance Indicators

- o Increased customer satisfaction rating from citizens and businesses
- o Increase the percentage of agency services provided online to 50%.
- o Sustain the target of returning facilities to compliance within 90 days.
- o Sustain the target of 80% of all facilities to be compliant at the time of inspection.
- o Improve permit lead time beyond the current target of 45 days

13. CONDITIONS

Conditions for Approval

Should development costs exceed the approved estimates by 10% or more, or should there be significant changes to the proposed technology scope of work or implementation schedule, the Agency must amend the PIJ to reflect the changes and submit it to ADOA-ASET, and ITAC if required, for review and approval prior to further expenditure of funds.

14. OVERSIGHT SUMMARY

Project Background

The Arizona Department of Environmental Quality has a multi-year strategy of migrating all citizen and regulated community services online to improve compliance by the regulated community. The myDEQ portal allows the regulated community to stay compliant with Arizona and Federal regulations. The portal is a continuation of efforts from prior years which only has 18,000 businesses users of the myDEQ application.

Every year citizens and businesses transact with ADEQ in obtaining required licenses and submit reports to demonstrate compliance with environmental regulations. These transactions using paper forms create increased re-work that is error prone and time consuming resulting in increased processing times and regulatory burden for businesses. In addition, the Governor's goal of transforming the government by providing services at the speed of business could not be achieved with the current paper process.

Business Justification

DEQ will increase the number of online services to agencies to 50% and will increase the customer satisfaction ratings from citizens and businesses. The agency will have 80% of facilities to be compliant with State and Federal environmental regulations during inspections and returning facilities needing to obtain licenses and submit reports, will be in compliance within 90 days of inspection. The agency will save a total of 1246 hours with the implementation of online services for the leaking underground storage tanks and 800 hours of open burn permits being available online.

Implementation Plan

The agency will be responsible for the network configuration, development operations, business analysis, and project management. The agency and vendor/contractor (Knowledge Services) will be responsible for assisting in the development of the application. DEQ is only using the Knowledge Services contractors to execute the work. DEQ is controlling and managing the project with the requirements, they are using a mix of contractors and full time employees to complete the development of work.

DEQ will select a portfolio of services to modernize and make available online, process stream map them and lean out the processes, then do a business requirements analysis. Finally, DEQ will develop the functionality in an Agile / Scrum methodology.

Vendor Selection

This work is being performed in-house by DEQ full time employees, with help of Knowledge Services contractors who are already on State Contract and have been involved and comfortable with the previous myDEQ projects.

Budget or Funding Considerations

The budget for this project is 100% base budget.

There are no operational costs associated with the project, the operational requirements for years 1-5 to this solution will be maintained in house by ADEQ FTE.

15. PIJ REVIEW CHECKLIST

Agency Project Sponsor

Michael Keyack

Agency CIO (or Designee)

Gary Heller

Agency ISO (or designee)

David Crowfoot

OSPB Representative

ASET Engagement Manager

Yan Gao

ASET SPR Representative

Agency SPO Representative

Agency CFO

Jared Sprunger
